IN THE SPECIFICATION

Please amend the specification as follows:

The paragraph beginning at page 5, line 1, is amended as follows:

Turning now to the detailed description, FIG. 1 relates to a cross-sectional view of an example BGA package useful in explanation and understanding of background and example embodiments of the present invention. More particularly, FIG. 1 illustrates a BGA package 100 formed on a substrate 110 having a die 120 mounted thereto, and hermetically sealed with die attach material 130. Illustrated are conductive (e.g., gold) wires 140 for electrical interfacing from ~~ones of~~ example power or ground planes 150 to die 120. The BGA package 100 itself may be mounted on another substrate or PCB through conductive bumps/balls 160 on the bottom of the package. The package may be contained in an encapsulation 180.

The paragraph beginning at page 6, line 3, is amended as follows:

Turning next to FIG. 2, there is shown a bottom view of an example conductive BGA on a bottom of the FIG. 1 BGA substrate. More specifically, the bottom view [[210]] 200 of the substrate 110 illustrates an example layout of the substrate's bottom side BGA. An example count of fifty-six conductive bumps/balls 160 is illustrated in the example arrangement, as arranged in rows and columns. The arrangement (e.g., number of conductive bumps/balls and grid array pattern) may vary to correspond to the transfer connections desired. For example, the number of conductive bumps/balls may be variable to meet package electrical, thermal and mechanical requirements. Illustrated are example industrial dimensions with an example

conductive bump/ball having an example width b of 0.637 mm, and an example pitch e of 1.0 mm. The example package bottom view [[210]] 200 also may have a package width D of 9.5 mm, and length E of 9.5 mm. The conductive bumps/balls 160 may be made of metal alloy such as [[an]] a eutectic tin/lead mixture (e.g., 63%Sn/37%Pb), or may be a conductive-filled polymer. Besides having assigned conductive bumps/balls utilized for predetermined electrical connections, some reserve conductive bumps/balls may be further included and unassigned/reserved for future design use.

The paragraph beginning at page 7, line 8 is amended as follows:

More particularly, the example FIG. 4 PCB shows six layers 410 with layers L1, L3, L4, and L6, for example, ~~being~~ for signal transfer, layer L2 for power transfer, and layer L5 for grounding purposes. Each of the layers 410 may, for example, provide a singular function (e.g., power transfer) throughout an entirety of its layer, or may be sub-divided into differing areas to provide multiple differing functions (e.g., layer L2 may be sub-divided to provide partial signal transfer and partial power transfer functions). Signal, power and ground layers may be constructed of copper foil, for example.

The paragraph beginning at page 9, line 20, is amended as follows:

FIG. 5 illustrates a cross-sectional side view 500 of an example (advantageous) embodiment of the present invention with standoff arrangements, e.g., standoff/power pins 510, between the BGA package 100 and the PCB 310. These standoff/power pins may be separately provided/installed structures, or may be integrated with the BGA, or with the PCB component. The standoff component may be of any suitable shape or size including, for example, ~~may be~~ the

shape of the illustrated pins, ~~may be~~ bar-shaped, ~~and may~~ or alternatively ~~be~~ rectangular or frame shaped.

The paragraph beginning at page 10, line 5, is amended as follows:

The FIG. 5 example standoff/power pin may be constructed essentially of rigid material, and may have suitable standoffs having a predetermined rigid standoff thickness [[at]] of at least one portion thereof (e.g., stops)~~, so as~~ to buttress against and hold the BGA package at a fixed predetermined (standoff) distance from the receiving substrate. This provides an improved controlled standoff distance S', and may help to reduce or manage thermal/mechanical stresses which may occur to differing BGA connections during the standard life of the product. This reduction or greater control (e.g., uniformity) in stress due to controlled standoff can increase the reliability of the BGA connections at the PCB/component interface, as stresses are distributed more equally. In one embodiment at least a portion of at least one pin of a plurality of rigid standoff pins has either a dumbbell shape or a rolling-pin shape wherein protruding portions of the dumbbell shape and the rolling-pin shape buttress against the electrical components to serve as the distancing control structure to control the standoff distance.

The paragraph beginning at page 10, line 18, is amended as follows:

In addition to standoff, the example embodiment in FIG. 5 also may be used to provide another (dual) function of providing an electrical path or function to at least one of the opposing electrical components (e.g., the interfacing substrate and receiving substrate) of the arrangement. For example, the standoff/power pins also may be used to increase efficient power delivery. As one example, the standoff/power pins may be attached and electrically connected to a receiving

substrate's power or ground layer 410~~, so as~~ to directly provide an electrical conduction path to the BGA package 100. The delivery of power/ground through the standoff/power pins lessens the dependency on vias and conductive bumps/balls as a conduit for power or ground, and frees up some conductive bumps/balls for other uses. Further, ~~ones~~ at least some of the FIG. 1 conductive (e.g., gold) wires 140 may be able to be eliminated as the standoff/electrical device (e.g., standoff/power pin) arrangement can be used as an electrical conduction path instead. As another embodiment, the pin can be arranged ~~so as~~ to provide an electrical path with respect to only one of the substrates. For example, the pin may provide an electrical path from one electrical plane to a differing electrical plane within the same substrate. With the FIG. 5 embodiment helping to improve routing of power and signals, a side advantage is that the PCB layers may be able to be better optimized for cost and performance.

The paragraph beginning at page 14, line 14 is amended as follows:

It should be noted that, in such a situation, the capacitive-type standoff/power pin may be providing an electrical function solely to a single substrate rather than electrically interfacing the two substrates. As one example, the capacitive device could serve as an electrical path/device for one of the substrates in that the inner conductive layer and the outer conductive layer could be electrically connected to the same substrate, while the capacitive device is electrically insulated from the other substrate. However, the standoff/power pin would still provide physical interfacing by contacting both substrates ~~so as~~ to control the standoff distance. As yet another example, the standoff/power pin may be formed into a tubular inductor, or may be of an even more complex construction containing ones of resistors, capacitors and inductors, to result in, for

example, [[an]] a complex impedance arrangement, an electronic filter arrangement, [[etc]] and so forth.

The paragraph beginning at page 15, line 3 is amended as follows:

In conclusion, reference in the specification to "one embodiment", "an embodiment", "example embodiment", etc., means that a particular feature, structure, or characteristic described in connection with the embodiment is included in at least one embodiment of the invention. The appearances of such phrases in various places in the specification are not necessarily all referring to the same embodiment. Further, when a particular feature, structure, or characteristic is described in connection with any embodiment, it is submitted that it is within the purview of one skilled in the art to ~~effect~~ affect such feature, structure, or characteristic in connection with other ~~ones of the~~ embodiments. Furthermore, for ease of understanding, certain method procedures may have been delineated as separate procedures; however, these separately delineated procedures should not be construed as necessarily order dependent in their performance, i.e., some procedures may be able to be performed in an alternative ordering, simultaneously, [[etc.]] and so forth.

The paragraph beginning at page 16, line 3 is amended as follows:

~~As one example of alternatives, while~~ While the foregoing example embodiments illustrate using the standoff arrangements of the present invention to provide dual standoff control and electrical function between a package and another substrate, practice of alternative embodiments of the present invention may also have uses providing dual standoff control and electrical function between other types of items. This includes, for example, providing

standoff/electrical-functions between stacked [[die]] dies, between a die and a substrate, [[etc.]] and so forth. Further, the standoff arrangements are not limited to standoff/power pins, or to arrangements that penetrate the components (e.g., substrates) to which it provides the standoff or electrical function. Finally, practice of the various embodiments of the present invention is not limited to arrangements providing the standoff and electrical functions equal to one another.[[, e.g.,]] For example, an embodiment may have standoff/electrical-function arrangements [[where]] in which standoff/power pins have a primary purpose of power delivery, and a lesser function of standoff distance control, or vice versa.

The paragraph beginning at page 16, line 14 is amended as follows:

~~What is claimed is:~~